U.S. Environmental Protection Agency
Great Lakes National Program Office
Significant Activities Report

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February 2002

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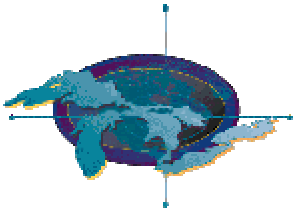
INTERNATIONAL ACTIVITIES

Group Tackles Environmental Indicators for Lake Huron

James Schardt, Vicki Thomas, and Duane Heaton of the USEPA Great Lakes National Program Office (GLNPO) participated in the Lake Huron Workshop in Port Huron, Michigan on January 24th, 2002. This binational workshop was organized by Michigan Department of Environmental Quality's Office of the Great Lakes, GLNPO, and Environment Canada. The focus of the meeting was on developing environmental indicators for Lake Huron. During the morning plenary session, James Schardt gave a presentation on Lake Huron Indicators: An Overview. Duane Heaton's plenary presentation on Biodiversity Investment Areas (BIAs) emphasized those BIAs around Lake Huron, and was based on the binational paper integrating nearshore terrestrial, coastal wetlands, and aquatic BIAs presented by Ron Reid and Karen Rodriguez at the 2000 State of the Lakes Ecosystem Conference. Duane Heaton also gave a presentation on the Great Lakes Coastal Wetland Consortium in one of the breakout sessions. The conference was very successful, with about 140 enthusiastic participants. A meeting summary will be available. In April 2002, a progress report on the Lake Huron Initiative will be released along with the LaMP Updates. On the next day, GLNPO, the Michigan Department of Environmental Quality, Environment Canada, and the Ontario Ministry of Natural Resources initiated discussions on the possible scope of a formal, binational effort on Lake Huron. Follow-up discussions are planned for later this Winter. *(Duane Heaton, 312-886-6399, heaton.duane@epa.gov; James Schardt, 312-353-5085, schardt.james@epa.gov; Vicki Thomas, 312-886-6942, thomas.vicki@epa.gov)*

Planning for 2002 State of the Lakes Ecosystem Conference in High Gear



The Steering Committee for the State of the Lakes Ecosystem Conference (SOLEC) met on February 6th and 7th at the Cleveland Convention Center, which will be the site of SOLEC 2002 on October 16th and 18th. Approximately 30 committee members from the United States and Canada attended, coming to agreement on the agenda and structure of the 2-day conference. At SOLEC 2002, morning plenary sessions will utilize over 40 of the SOLEC indicators to provide an update on the overall state of the Great Lakes, management implications, the biological integrity of the Lakes, and the status of each of the Lakes and connecting channels. There will be afternoon breakout sessions on the first 2 days, which will include short presentations followed by facilitated discussions on the various components of the Great Lakes ecosystem and other relevant issues.
(Paul Bertram, 312-353-0153, bertram.paul@epa.gov; Duane Heaton, 312-886-6399, heaton.duane@epa.gov; Paul Horvatin, 312-353-3612, horvatin.paul@epa.gov; Karen Thompson, 312-353-8547, thompson.karen@epa.gov; Amy Zavallo, 440-250-1707, zavallo.amy@epa.gov)

SEDIMENTS

Milwaukee River and Harbor Cleanup Projects Are Center of Attention

On January 31st, 2002 GLNPO's Scott Cieniawski attended a meeting in Milwaukee, Wisconsin to discuss a variety of sediment assessment, remediation, and beneficial reuse projects recently completed, or scheduled for the Milwaukee Area of Concern. The main purpose of the meeting was to coordinate activities between the state, local, and federal agencies for addressing sediment issues within the Area of Concern. Participants provided updates on the status of several projects co-funded by USEPA's Great Lakes National Program Office, including the "Topsoil Creation Project," "Remedial Alternatives at the Milwaukee CDF," and "Laser-Induced Fluorescence for Polycyclic Aromatic Hydrocarbon Analysis." Additionally, the group discussed a potential sediment remediation project on the Kinnickinnic River that would involve cleaning up approximately 30,000 cubic yards of sediments contaminated with up to 800 mg/kg of polycyclic aromatic hydrocarbons. The Corps of Engineers, GLNPO, and the Wisconsin Department of Natural Resources discussed potential sources for technical and financial support for the project. *(Scott Cieniawski, 312-353-9184, cieniawski.scott@epa.gov)*

Eighteenmile Creek Sediments Probed

Under a grant from USEPA's Great Lakes National Program Office, the New York State Department of Environmental Conservation (NYSDEC) completed a sediment sampling survey on Eighteenmile Creek as a follow up to a 1994 sampling survey. Sampling results indicated that high levels of trace metals (cadmium, 20.1 ppm; chromium, 1,490 ppm; copper, 2,450 ppm; lead, 4,490 ppm; nickel, 997 ppm; silver, 8 ppm and zinc, 15,100 ppm), Mirex (380 ppb), PCBs (25.85 ppm) and dioxins and furans were found in the sediment. This confirmed that contaminated sediments were the primary source of contamination responsible for inclusion of a segment of the Erie Canal and Eighteenmile Creek on the NYSDEC Priorities Waterbodies List, which indicates waterbodies with impaired usage. This report will be forwarded to the NYSDEC's Division of Environmental Remediation for their evaluation of remedial needs. The findings have been published in a report entitled "Eighteenmile Creek Sediment Study - December 2001" and the report is available from the NYSDEC. *(Demaree Collier, 312-886-0214, collier.demaree@epa.gov)*

ECOSYSTEM PROTECTION AND RESTORATION

Winners of the 2001 Conservation and Native Landscaping Awards Announced

On Saturday, January 26th, 2002, USEPA GLNPO's Danielle Green represented USEPA at the Illinois Association of Park Districts meeting and presented the 2001 Conservation and Native Landscaping Awards to eight park districts and municipalities within the Chicago Wilderness region. The winners were:

- The Village of Antioch, Illinois, for ***The William E. Brook Memorial Wetland Sanctuary and Entertainment Center***. This six-acre wetland restoration project includes wetland vegetation plantings in two ponds. The entrance is accentuated with berms, flowers, trees, a boardwalk and a resting area for waterfowl. With the help of student volunteers, the site has become an excellent educational wetland sanctuary.

- The Batavia Park District, Illinois, for ***The Wildflower Sanctuary on the Batavia Riverwalk***. Since 1991 the Batavia Plain Dirt Gardeners have removed invasive species, installed brick paths and lighting and planted hundreds of native plants, shrubs and trees. There are no paid staff members who exclusively work on this site. Volunteers put in an average of 200 hours per month tending to all the plants. Native plantings include a flood-plain garden and a mesic prairie garden.

- The Village of Elburn, Illinois, for ***The Prairie Park Project***. The Prairie Park is the first municipal park in the town of Elburn, Illinois. It is three acres in size and is the result of both volunteer and consultant efforts. This beautiful setting is enriched and protected habitat for waterfowl and other birds. The native landscaping has helped management of stormwater.

- The Geneva Park District, Illinois, for ***Peck Farm Park***. The 132-acre park provides critical habitat for native plants and animals due to the restoration of over 120 acres of agricultural land into tall-grass prairie. The natural areas also include wetlands, fens, waste water wetlands, a lake, woodlands and prairie. As part of the restoration effort, buildings and other structures have been renovated and are used for educational and recreational purposes.

- The Portage Department of Parks and Recreation, Indiana, for ***The Woodland Park Savanna Restoration Project***. The purpose of the project is to restore the savanna and prairie plant communities through a combination of manual cutting, localized herbicide application, prescribed fire, and planting of native nursery stock seeds. The site is suitable for the preservation of the federally endangered Karner blue butterfly, and one of the goals of the project is to reestablish the butterfly at the site.

- The Village of Riverside, Illinois, for ***The Des Plaines Riverbank Restoration Project***. The project involves a large number of village residents in the restoration and maintenance of the riverbank. Not only is a degraded area being restored to the rich, diverse natural character that it had prior to European settlement, but as part of the Des Plaines River Watershed, the project is contributing to the viability and diversity of the entire river system. Other native plantings are integrated into the public property throughout the town.

- The Spring Brook Nature Center, Itasca, Illinois, for the ***Spring Brook Nature Center***. The nature center in Itasca is located on 67 acres. The mission is to restore, manage, preserve, and interpret unique natural resources for the public good and to foster environmental stewardship. The Nature Center has an extensive education program which includes volunteer opportunities

for students as well as the general public. The ecosystems currently being managed include rare oak savannas and wetlands.

- The Westmont Park District, Illinois for ***The Twin Lakes Woods***. The 18-acre project enhances a stream corridor and a wetland. The project converted a detention basin into a native-landscaped wetland. Bioengineering eliminated erosion, reduced non-point source pollution, and improved wildlife habitat.

(Danielle Green 312-886-7594, green.danielle@epa.gov)

Historic Spawning and Nursery Areas of Lake Superior Fish Mapped

Working under a grant from USEPA's Great Lakes National Program Office, the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) has utilized a Geographic Information System (GIS) to identify historic spawning and nursery areas of Lake Superior fish. The GIS data has been used to create maps of 1,566 Lake Superior spawning sites for various species of interest. The maps generated have been produced at a Lake-wide scale, along with 41 detailed maps giving more precise locations. The Lake Superior spawning and nursery locations will be made available through GLIFWC's internet map server, allowing public viewing of information for any of the 46 fish species in combination with other information on navigation routes, lake bathymetry, and the lake and rivers in the Lake Superior watershed. *(Sandra Hellman, 312-353-5006, hellman.sandra@epa.gov; Duane Heaton, 312-886-6399, heaton.duane@epa.gov)*

INVASIVE SPECIES

Ballast Water Treatment Technologies Considered

A workshop on Ballast Water Treatment Technologies was held in Silver Springs, Maryland on January 29th and 30th, 2002. The purpose of the workshop, which was hosted by NOAA, was to improve planning, coordination, and information-sharing among federal agencies supporting ballast water treatment, technology development, and testing and demonstration. Presentations were made by representatives of the federal agencies as well as the various Principal Investigators working on specific ballast water projects. USEPA GLNPO's Marc Tuchman gave a presentation describing some of the Great Lake-specific issues related to ballast water, and provided details on the GLNPO Invasive Species Program. Technologies discussed at the workshop included: Ozonation; UV light; filtration; the use of resistant biofilm coatings of ballast tanks; ultrasound and chemical treatment. Of particular interest was a discussion related to the need for the development of standardized protocols and criteria to determine the efficacy of promising technologies. *(Marc Tuchman, 312-353-1369, tuchman.marc@epa.gov)*

Aquatic Nuisance Species Dispersal Barrier Launch Readied

On January 10th, 2002, Marc Tuchman attended the Chicago Ship and Sanitary Canal Aquatic Nuisance Species Dispersal Barrier Advisory Panel meeting. This demonstration project as proposed in the National Invasive Species Act, authorized the U.S. Corps of Engineers to identify methods for preventing and reducing the dispersal of aquatic nuisance species between the Great Lakes basin and the Mississippi River system. An electrical barrier was selected as the best option for such a barrier and construction of the barrier was completed in December 2001. The operation of the barrier is imminent, awaiting the final negotiation by the Corps of Engineers of a long-term Operation and Maintenance agreement with the Contractor. Once all the contracts are in place the effectiveness of the barrier will be monitored for two years. *(Marc Tuchman, 312-353-1369, tuchman.marc@epa.gov)*

Ballast Water Panel Studies Invasive Species Risks

On January 10th, 2002, the No Ballast on Board (NOBOB) Advisory Panel met via conference call to update the status of the NOBOB Project. This project is jointly funded by USEPA's Great Lakes National Program Office, the National Oceanic and Atmospheric Administration and the U.S. Coast Guard. The focus of the project is on examining the risk from foreign organisms from those ships entering the Great Lakes system that are exempt from the ballast water exchange requirements. Ships that come in from foreign ports with a full load of cargo on board may have their ballast tanks "empty," with no ballast on board according to the regulations. However, these "empty" tanks can still contain sediments, sludges, and can thus harbor live biological organisms. Under this project, a total of 22 vessels have been sampled so far and analysis is currently underway to examine the phytoplankton, zooplankton, bacterial and viral communities that reside in the bottom sediments of these NOBOB vessels. Preliminary results confirmed the presence of large numbers of live organisms, as well as many resting stages and cysts. Sampling will continue through 2002. *(Marc Tuchman, 312-353-1369, tuchman.marc@epa.gov)*

RESEARCH AND MONITORING

Quality Input Means Quality Output

USEPA GLNPO's Quality Assurance Team Leader, Lou Blume, is a co-presenter of two papers accepted for presentation at USEPA's 21st Annual Conference on Managing Environmental Systems. The Conference will be held in Phoenix Arizona from April 8th to 11th, 2002. The papers are:

1. "Quantifying Uncertainty: Are We There Yet?", which Lou co-authored with Judy Schofield and Ken Miller, of DynCorp I&ET, Inc. This presentation will focus on techniques used for quantifying uncertainty utilized in the Lake Michigan Mass Balance Project.
2. "A Menu of Quality Systems: From TV Dinners to Filet Mignon," which Lou co-authored with William Telliard and Marion Kelly, of the Engineering and Analysis Division of USEPA's Office of Science & Technology, Office of Water; and Harry B. McCarty and Judy Schofield, DynCorp, Science & Engineering Group. This presentation will compare graded approaches for quality systems of projects that deal with projects of various scope from national rule-making; to sampling methodologies such as mercury, to support national regulations; to grant and demonstration projects at localized areas.

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